USAF opens up Peace Shield

BY DOUGLAS BARRIE

The US Air Force is looking to Hughes, Unisys, Westinghouse or General Electric to pick up the pieces of the Peace Shield Saudi Arabian air-defence ground environment following termination of most of Boeing's contracts on the beleaguered programme.

The USAF says it cut the bulk of the $1.05 billion contract because of Boeing's "...failure to make progress so as to endanger final operational capability".

Peace Shield was intended to provide Saudi Arabia with an integrated air-defence ground environment, to be operational by April of this year.

Development difficulties encountered by Boeing pushed back service entry to August 1994. The USAF believes that other contractors will be capable of getting Peace Shield into service earlier than 1994.

Saudi Arabia is understood to have placed pressure on the USAF to take action over continuing delays to the programme. The USAF says "...the Government of Saudi Arabia has requested that the USAF expedite reprocurement action".

Boeing's difficulties centred on developing the software for integrating the disparate sensors, sector operations, sector command and command operations centres.

The programme appears to have suffered a similar fate to other software-intensive projects in that the prime contractor underestimated the quantity and the technical complexity of the software. Peace Shield required hundreds of thousands of code lines to be developed.

The depth of the problem encountered by the company was indicated by its failure to meet even a considerably revised continental United States integration testing. Integration testing marks a key hurdle in the life cycle of developing a geographically dispersed software system.

While Boeing will no longer be a major participant in the development of Peace Shield, it will retain its contracts for the installation of the General Electric FPS-117 radars and interface systems for the Boeing E-3 airborne warning and control system aircraft.

Rapier programme progresses with Mk2 approval

The Rapier Mk2 anti-aircraft missile has achieved a critical milestone by gaining design certification from the UK Ministry of Defence.

The Mk2A and Mk2B missiles form a key part of British Aerospace's Rapier 2000 programme, the target of considerable criticism from the UK Parliament's Defence Committee last year.

Design certification means the MoD is satisfied that the latest development variants of the Rapier have reached production standard, clearing the way for a production order.

The Mk2A has a "hitile" semi-armour-piercing warhead while the Mk 2B has a fragmentation warhead triggered by a proximity fuze. The system is due to be deployed mid-90s.

Israel completes development of Hellstar sensor

Israel has completed the development of the multi-mission stabilized integrated system (MSIS) sensor equipment for installation on the Hellstar remotely piloted vehicle (RPV), now under development for the Israeli Navy.

The sensor system was originally developed for fast patrol boats and missile boats and has been adapted for aerial use. It will be test flown on the Hellstar prototype.

MSIS integrates three sensors: charge-coupled device TV camera, thermal imager and laser rangefinder/designator.

The system, which has built-in automatic target-tracking, is capable of communicating with navigation and weapons systems.

Hellstar is being developed by MATA, the helicopter plant of Israel Aircraft Industries (IAI), using the US Navy Gyrodyne QH-50 RPV as the basis for the airframe. It made its first hover test on 18 July, 1990.

The RPV will carry a 450lb payload consisting of the MSIS and a radar now under development by IAI subsidiary Elta.

SUPERPLASTIC B-2 FORMED BY LTV

US aerospace components specialist LTV Aircraft Products Group has had to develop special materials production processes to manufacture the intermediate airframe sections of the Northrop B-2 stealth bomber. The company uses a technique known as superplastic forming to produce contoured titanium sections for the B-2 at temperatures of 930°C.